



STATE OF MARYLAND

# DMMH

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Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

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## March 23, 2012

### Public Health & Emergency Preparedness Bulletin: # 2012:11 Reporting for the week ending 03/17/12 (MMWR Week #11)

#### CURRENT HOMELAND SECURITY THREAT LEVELS

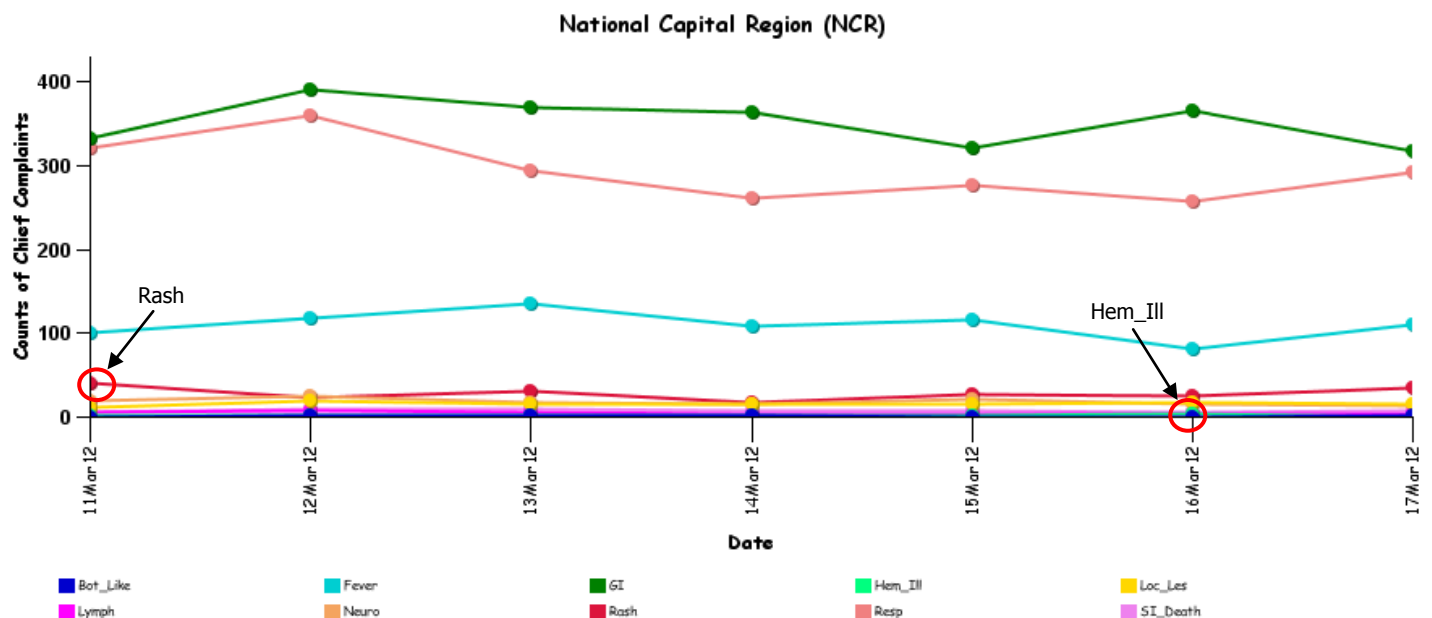
**National:** No Active Alerts  
**Maryland:** Level One (MEMA status)

#### SYNDROMIC SURVEILLANCE REPORTS

##### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

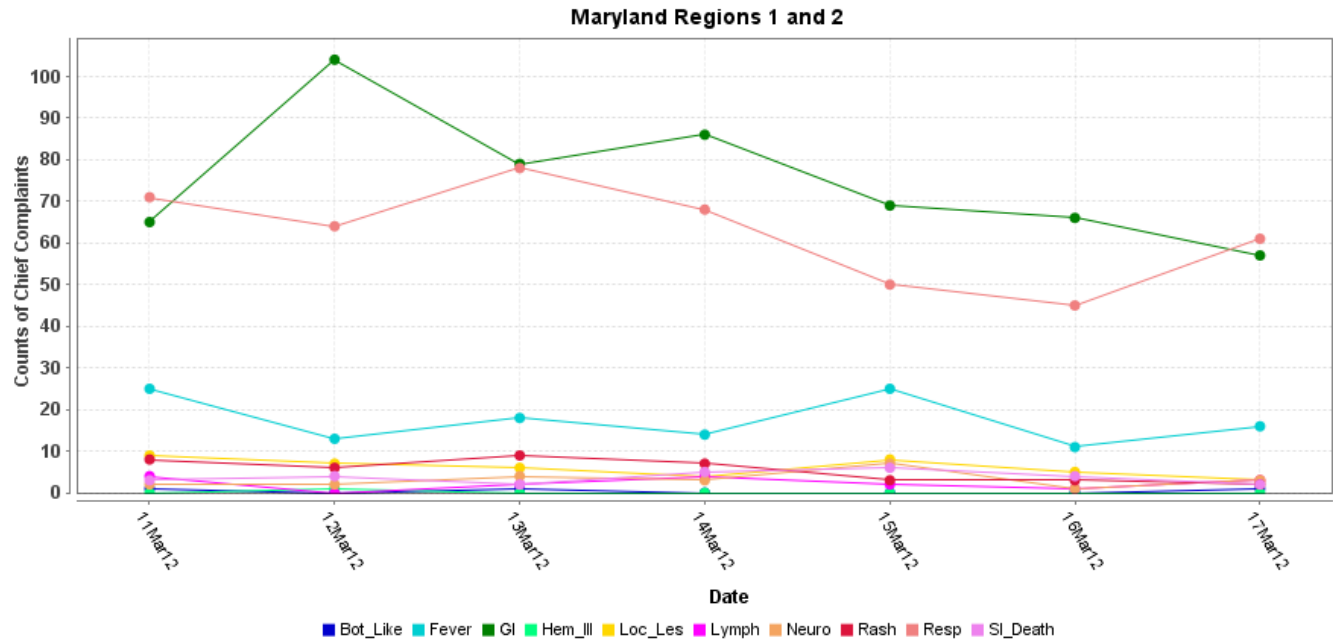
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

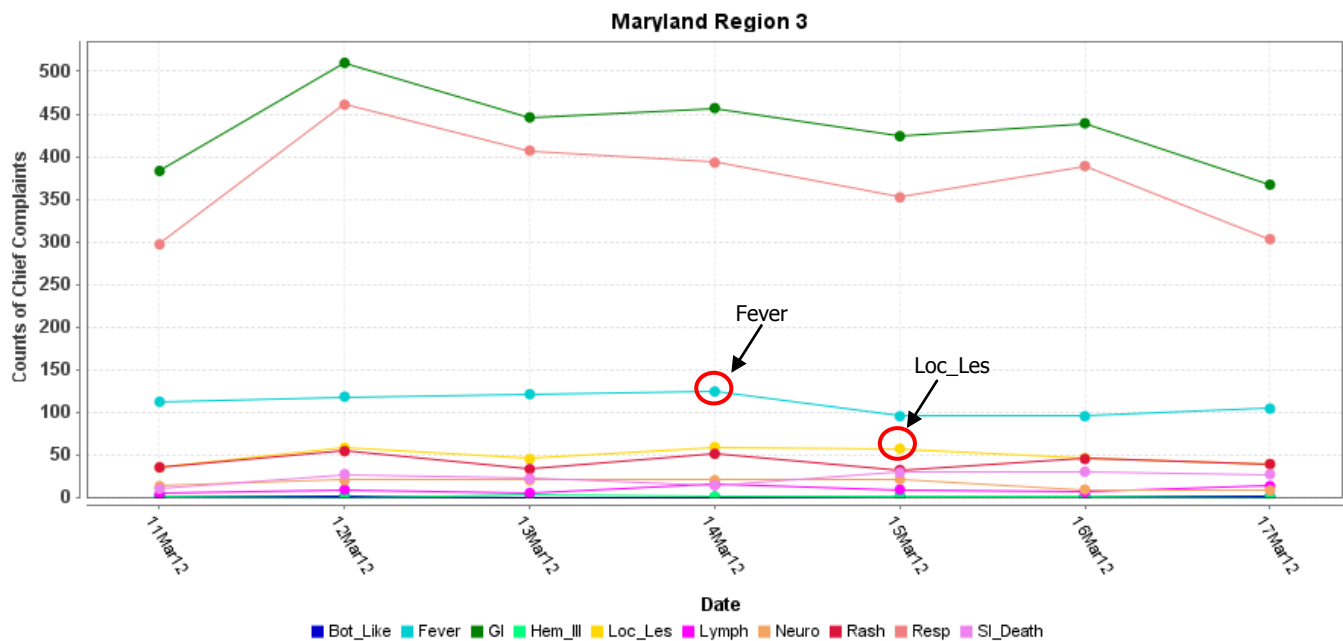


\*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

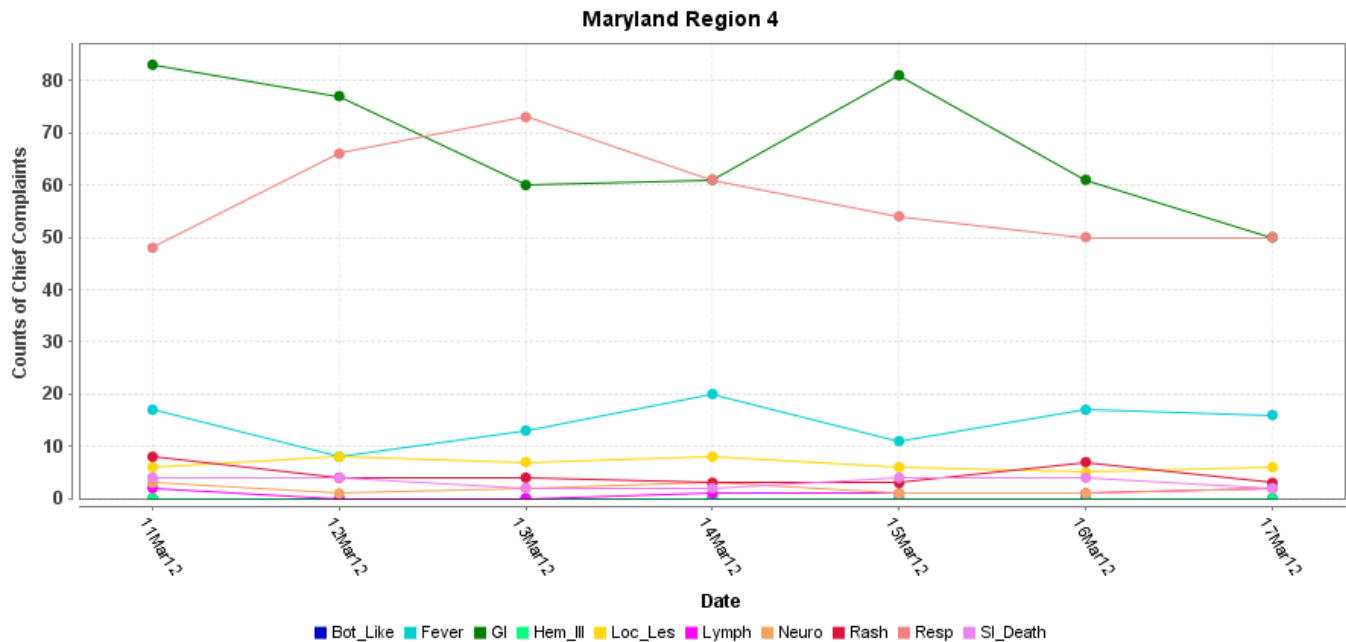
**MARYLAND ESSENCE:**



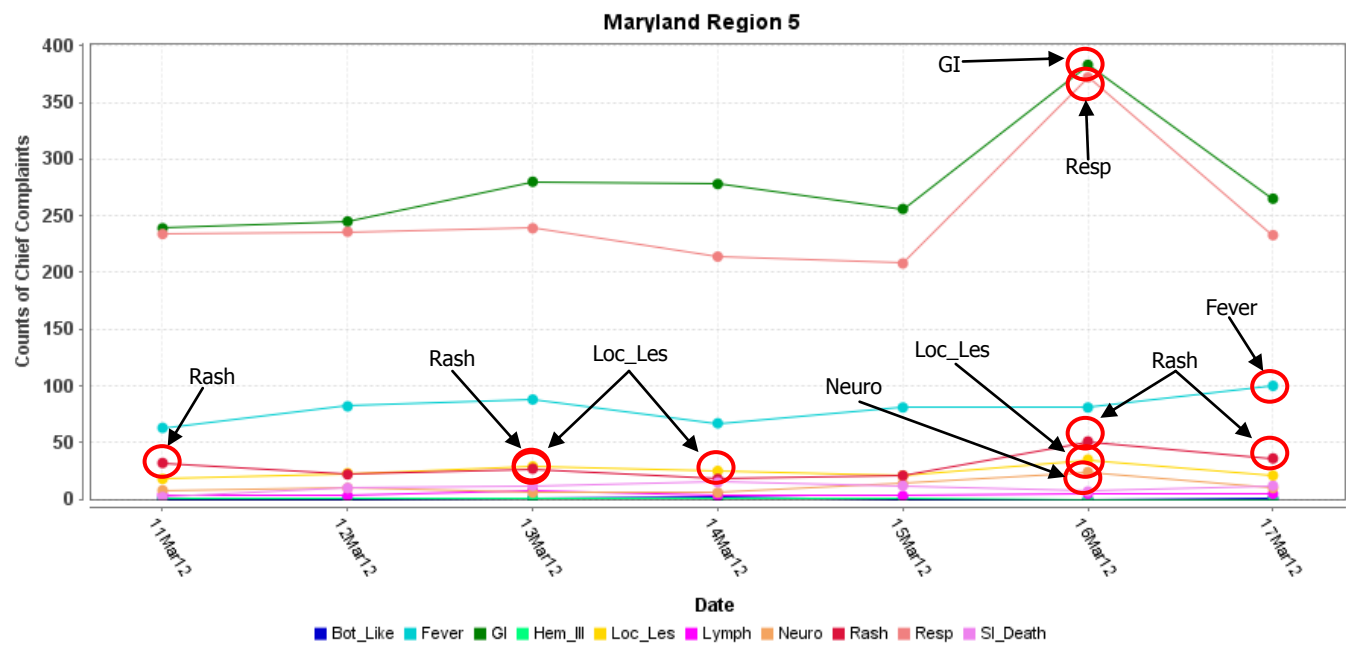
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

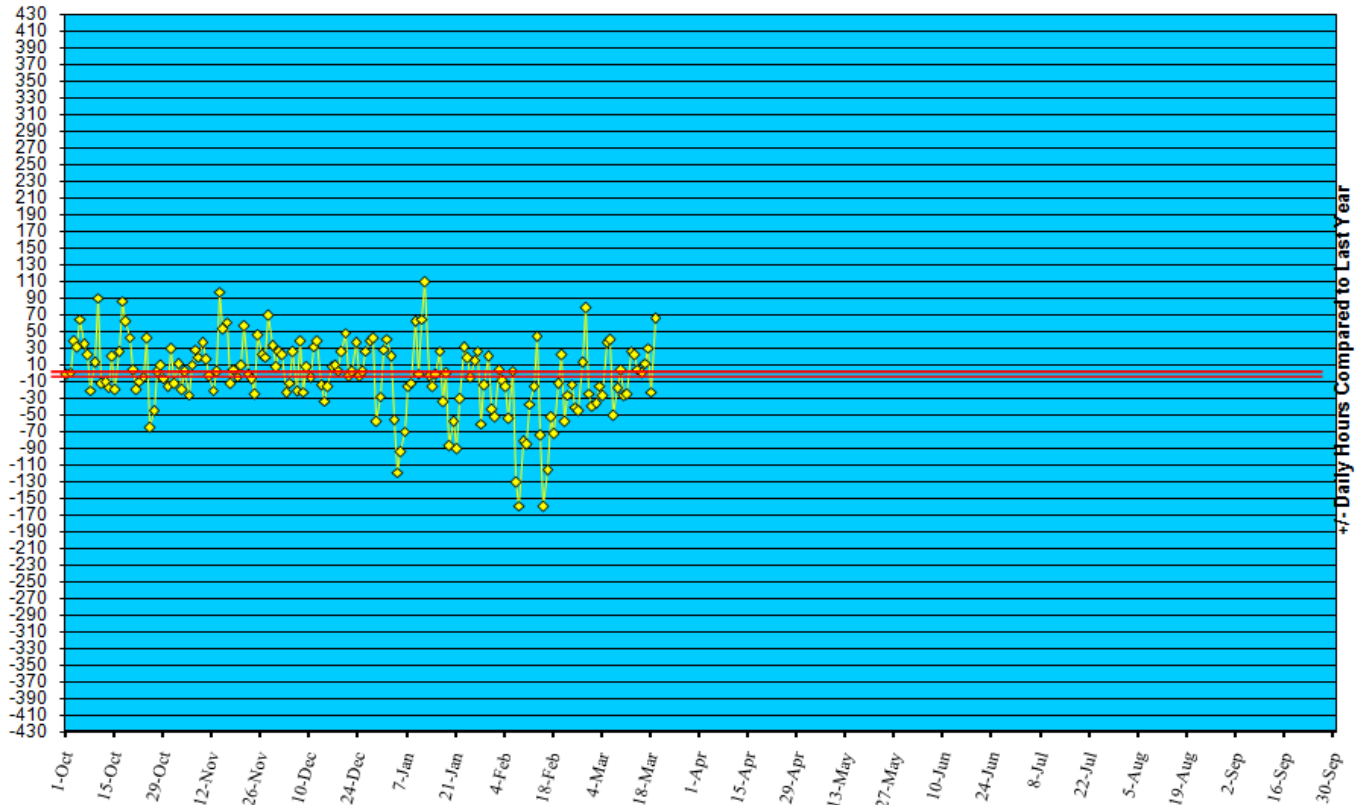


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/11.

### Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '11 to March 17, '12



## REVIEW OF MORTALITY REPORTS

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2012 did not identify any cases of possible public health threats.

## REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

### COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

#### **Meningitis:**

New cases (March 11 – March 17, 2012):

Prior week (March 4 – March 10, 2012):

Week#11, 2011 (March 12 – March 18, 2011):

#### **Aseptic**

7

10

8

#### **Meningococcal**

0

0

0

## 10 outbreaks were reported to DHMH during MMWR Week 11 (March 11 – March 17, 2012)

### 8 Gastroenteritis outbreaks

7 outbreaks of GASTROENTERITIS in Nursing Homes (Western, National Capital Region, 3 Baltimore Metropolitan Area, 2 Eastern)

1 outbreak of GASTROENTERITIS in a Continuing Care Retirement Community

### 1 Respiratory illness outbreak

1 outbreak of ILI/PNEUMONIA in a Nursing Home

### 1 Other outbreak

1 outbreak of CONJUNCTIVITIS in a School

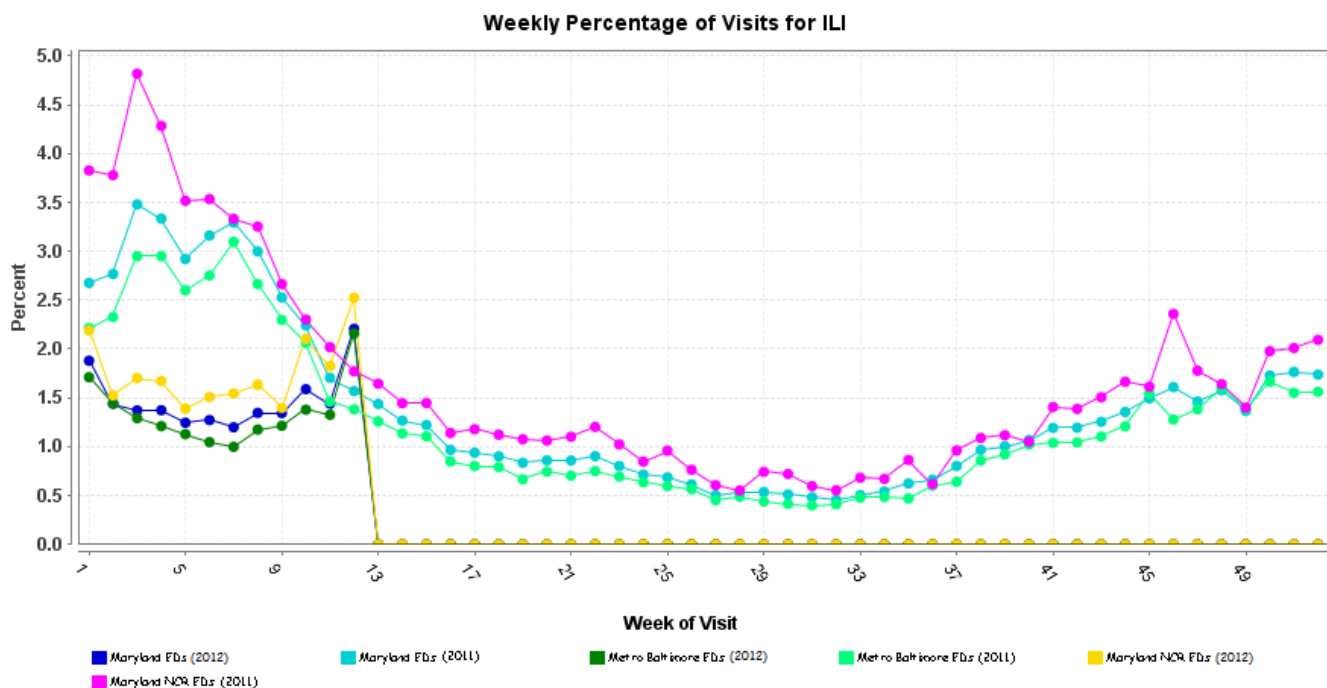
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 11 was: Widespread Activity, Minimal Intensity.

## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

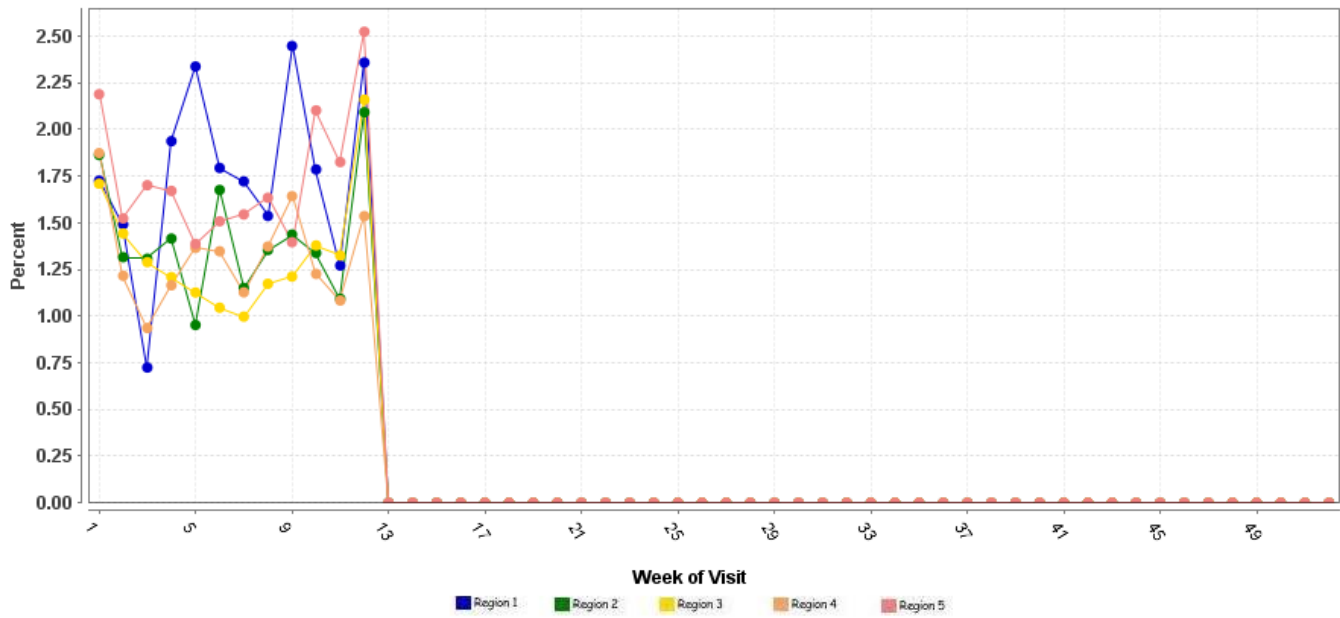
Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



\* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total

**Weekly Percentage of Visits for ILI**

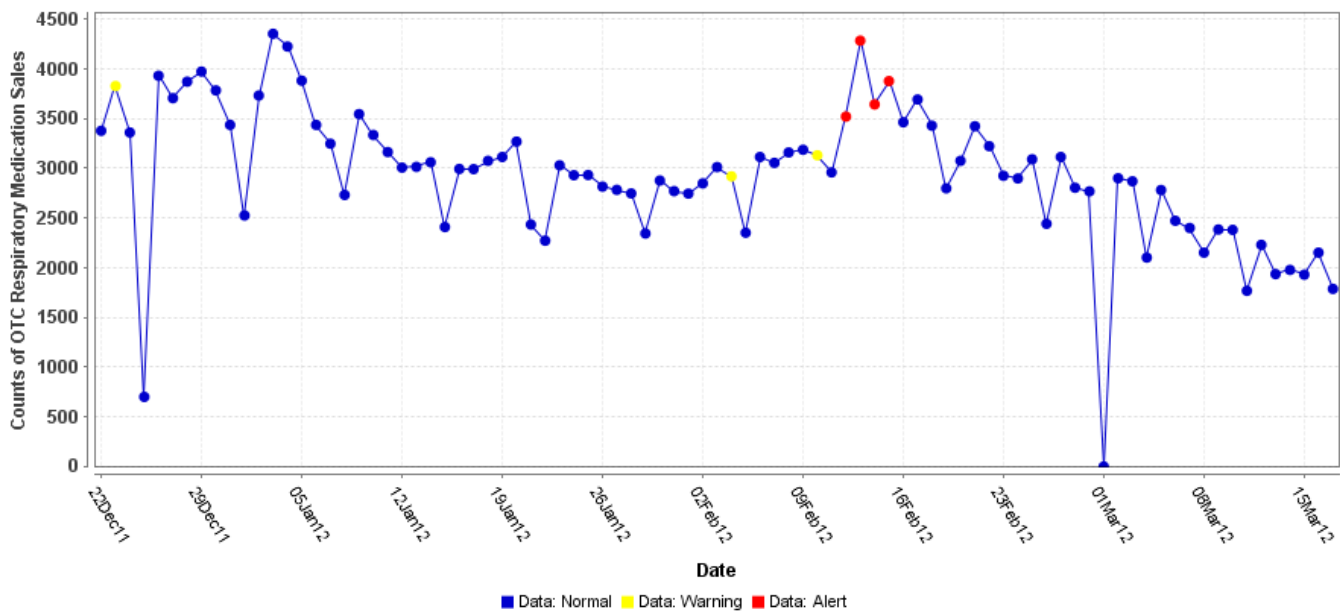


\*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.

**OTC Respiratory Medication Sales**



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of March 12, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 596, of which 350 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA, HUMAN (INDONESIA):** 12 March 2012, As of 12 Mar 2012, the Ministry of Health of Indonesia has notified WHO of a new case of human infection with avian influenza A(H5N1) virus. The case is a 24-year-old female from Bengkulu Province. She developed fever on 23 Feb 2012 and was hospitalized on the following day. She had breathing difficulty; her condition deteriorated, and she died on 1 Mar 2012. Epidemiological investigation conducted by a team of public health and animal health authorities indicated an exposure to a potentially contaminated environment where sudden deaths of poultry had occurred recently. The case was confirmed by the National Institute of Health Research and Development, Ministry of Health. To date, of the 187 cases reported in Indonesia since 2005, 155 have been fatal.

## **NATIONAL DISEASE REPORTS**

**LISTERIOSIS (NEW JERSEY):** 15 March 2012, Nearly 2 weeks after a 38-week pregnant woman was diagnosed with a *Listeria monocytogenes* infection, the New Jersey Department of Health and Senior Services (NJDHSS) issued a warning Thursday, 15 Mar 2012, advising the public not to eat any cheese products produced by El Ranchero del Sur of South River, NJ. The woman was diagnosed with the potentially fatal infection on 2 Mar 2012 at a New Brunswick hospital. The Middlesex County Health Department performed an investigation on her infection and samples of cheese products were analyzed by the NJDHSS Public Health Environmental and Agricultural labs, who confirmed the presence of *Listeria monocytogenes* in a sample of Los Corrales Queso Fresco Fresh Cheese and Banana Leaf code dated 03/16/12. El Ranchero del Sur agreed to a voluntary recall its products and to close its production plant while the investigation is in progress. According to the NJDHSS health alert, El Ranchero del Sur cheese products can be found primarily in Mexican and Latin American grocery stores, restaurants, and other Hispanic food establishments under the name brands El Ranchero, Los Corrales, and Carnes Don Beto with the plant number 34-0013669 marked on the label. All products are 14 ounces in weight except for the Queso Hebra Oaxaca String Cheese ball in 10 pound packages. *Listeria monocytogenes* is a bacterium that is normally found in the environment and has been found in animals, birds and vegetation. It can be found in raw foods and in processed foods that get contaminated after processing. Some of the most common foods that are associated with listeriosis are raw milk, soft cheeses, vegetables, and many ready to eat meats like hot dogs, deli meats and pates. Those at greatest risk of serious listeriosis include pregnant women, newborns, the elderly, and adults with weakened immune systems. Most healthy persons show no symptoms of this disease. Initial symptoms of food-borne listeriosis include fever, muscle aches, fatigue and sometimes gastrointestinal symptoms, such as nausea, vomiting or diarrhea. Primarily in high risk groups but occasionally in healthy adults, the infection can spread to the blood and central nervous system where it can cause sepsis and meningitis. Due to a naturally depressed immune system, pregnant women are about 20 times more likely than other healthy adults to contract this disease. Though many women may only experience mild flu-like symptoms, infections during pregnancy can have devastating consequences to the fetus which include stillbirth or miscarriage, premature delivery and serious infections in the newborn. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**HANTAVIRUS (MONTANA):** 14 March 2012, State health officials say the 1st confirmed case of hantavirus pulmonary syndrome (HPS) [in 2012], has shown up in Montana. The Montana Department of Public Health and Human Services [DPHHS] says the Montana resident is expected to make a full recovery and it appears the person acquired the disease while in another state. This marks the 33rd confirmed HPS case in the Treasure State since 1193 [sic., 1993] with DPHHS saying in a news release that the state typically sees one or 2 cases a year, making the state 2nd only to New Mexico in the number of cases when adjusted for the state's population. "Montanans should be aware of the precautions they can take to avoid [a] hantavirus [infection] and the rodents that can carry it [the virus]," said DPHHS director Anna Whiting Sorrell. "People may be at risk when they come into contact with small rodents and their waste." Health officials warn that hantavirus [infection] cases often increase as the weather warms in the spring. As people begin to clean their garages and sheds, nesting material contaminated with dried saliva, urine, or droppings from infected deer mice [*Peromyscus maniculatus*] is disturbed, becomes airborne, and inhaled. Infections may also occur when these materials are directly introduced into broken skin or into the eyes or mouth. Although rare, persons have also become infected after being bitten by rodents. According to DPHHS State Medical Officer Dr Steven Helgersen, early symptoms of [a] hantavirus infection usually start with fever and muscle aches, and sometimes chills, headache, vomiting. Within a few days, symptoms progress to coughing and severe shortness of breath. The symptoms develop 1-6 weeks after exposure. "Early recognition and immediate medical care are key to surviving the illness," Helgersen said. "If someone is exposed to rodents and experiences symptoms -- especially severe shortness of breath, they need to seek treatment right away." Be sure to tell your doctor that you have been around rodents. This will alert your physician to look closely for any rodent-carried disease [virus], such as hantavirus[es]. The best way to prevent hantavirus transmission is by controlling rodent populations in areas where one lives and works. When cleaning areas where rodents may nest, the following precautions should be followed: Wear rubber or plastic gloves, thoroughly spray/soak area with a disinfectant or mixture of bleach and water to reduce dry dusty conditions in the area being cleaned, wipe or mop the area with a sponge or paper towel (throw away items after use, wash hands thoroughly with soap and warm water after removing gloves, never sweep or vacuum in these areas as this can stir up dust and aerosolize the droppings. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS**

**SALMONELLOSIS (CANADA):** 17 March 2012, 4 more children have been diagnosed with salmonellosis since yesterday [Fri 16 Mar 2012], as the city's public health department continues to investigate an outbreak of food poisoning that appears to have spread through a caterer serving hot lunches at schools and daycares. There have now been 27 lab-confirmed cases of the foodborne bacteria since Public Health declared an outbreak early this week, including 23 children and 4 adults. (2 of the adults are included in the tally even though their cases are believed to be unrelated.) Friday afternoon, 16 Mar 2012, the health department also added 2 schools to the list of those where children have become sick: Bayview Public School and Ecole elementaire Des Sentiers. Investigators are still analyzing food from a kitchen run by a franchise of The Lunch Lady, trying to confirm suspicions that its meat lasagna and beef tacos were contaminated. All 6 schools and a daycare where children are known to have become sick are served by one franchise of The Lunch Lady, which delivers meals to kids whose parents pay for the service. The results of the lab analysis are expected to take a few more days, perhaps even until next Wednesday [21 Mar 2012], said Public Health spokesman John Steinbachs. In the meantime, 2 Lunch Lady kitchens, on Boyd Avenue where investigators have been concentrating their efforts, and another in Kanata, are closed, said their owner. "We don't know what the source of the contamination is, and until we do, we're not going to be making or serving food," he said. Parents whose children get meals from those kitchens will have to make other arrangements for at least next week, the owner said. Even if the contamination can be traced to ingredients in the Boyd Avenue kitchen, Public Health will need to figure out how the salmonella got into the food. [The owner] said investigators have been interviewing his staff; the kitchen got a clean inspection after the health department knew about the outbreak, and another one just in February 2012. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**PSITTACOSIS (SCOTLAND):** 13 March 2012, A health board has launched an investigation into a suspected outbreak of a potentially deadly bug known as parrot fever or psittacosis. It is understood that a number of patients may have contracted the bug, which in severe cases can affect the heart and the brain, by inhaling dust from dry bird droppings or handling affected birds. NHS Tayside confirmed on Tuesday, 13 Mar 2012, that it had been forced to take action after laboratory tests identified some patients treated for pneumonia could have been suffering from the condition. The infection is caused by a type of bacteria known as *Chlamydia psittaci*, and can be fatal to the elderly and those with weakened immune systems. Dr Chris McGuigan, consultant in public health with the health board, said: "NHS Tayside's health protection team is currently investigating a small number of cases of pneumonia from earlier in 2012. We believe these cases may be due to an infection with a bacterium called *Chlamydia*. Such respiratory infections usually cause mild pneumonia or bronchitis. However, they can cause more severe illness." He added that "A laboratory has identified the organism as *Chlamydia*. Contacts for the cases have been appropriately advised and I would like to assure people that we have no reason to believe there is any risk to the wider public." (Psittacosis is listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**ANTHRAX (BEREA):** 11 March 2012, A total of 7 people from 2 villages in Berea district died last week after eating contaminated meat. It is suspected that the 7 who are from Masaleng and Ha Popa villages died after eating meat from a cow that had succumbed to anthrax. A number of people from the 2 villages have been hospitalised and are being treated for anthrax. The director general of Veterinary Services, Malefane Moleko, said they had received reports that the 7 died after eating contaminated meat. "We received a message on Tuesday [6 Mar 2012] that a number of people and livestock died of a disease suspected to be anthrax in Berea," Moleko said. "One of our doctors went to the district to investigate after receiving a message from the Ministry of Health that some people had died," he said. The disease had also killed 18 cattle and 6 donkeys in recent weeks. Moleko added that the Veterinary Services department was working hard to bring the disease under control. The department took samples on Wednesday [5 Mar 2012] and the results came out on Friday [8 Mar 2012] confirming that it was anthrax. The disease has so far been restricted to Berea district but there is a real danger that if it is not controlled it might spread to other areas. The consequences of such an outbreak could be catastrophic. The department of livestock in the area is now making preparations to launch a vaccination campaign to control the disease. Moleko said they had sent a message to World Organisation for Animal Health [OIE] in France to report the outbreak so that they will notify other countries. "As we export wool and mohair to other countries we need to notify them that there has been an outbreak that has affected a certain area and we have made sure that it's under control." The outbreak of anthrax in Berea district has raised fears it might have a bad effect on the country's wool and mohair exports. Lesotho exports about 3500 tonnes of raw wool annually, mainly to China, while mohair is destined for the South African market. The sales of wool and live animals are also a major source of income for the rural communities. Moleko said the outbreak could affect the market as some customers might be reluctant to buy wool and mohair from Lesotho. "We started shearing goats in May so we need to assure our buyers that the disease has been controlled and that the mohair from Lesotho is free from diseases," he said. There was need to assure buyers that the disease was confined to one place and it was being treated to ensure that it does not spread to other districts. Moleko urged people not to eat meat from dead animals as that could be dangerous to their health. He also advised the public to report the death of their livestock if they suspect diseases such as anthrax so that they can be controlled before they spread. Other animal diseases common in Lesotho include rabies and tuberculosis. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case



## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website:  
<http://preparedness.dhmf.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmf.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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## Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

**Table: Text-based Syndrome Case Definitions and Associated Category A Conditions**

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Botulism-like	<p>ACUTE condition that may represent exposure to botulinum toxin</p> <p>ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy.</p> <p>ACUTE descending motor paralysis (including muscles of respiration)</p> <p>ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.</p>	Botulism
Hemorrhagic Illness	<p>SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola</p> <p>ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF</p> <p>ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria</p>	VHF
Lymphadenitis	<p>ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)</p>	Plague (Bubonic)
Localized Cutaneous Lesion	<p>SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia</p> <p>ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia</p> <p>INCLUDES insect bites</p> <p>EXCLUDES any lesion disseminated over the body or generalized rash</p> <p>EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease</p>	Anthrax (cutaneous) Tularemia
Gastrointestinal	<p>ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract</p> <p>SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis</p> <p>ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea</p> <p>EXCLUDES any chronic conditions such as inflammatory bowel syndrome</p>	Anthrax (gastrointestinal)

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**  
(continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person &gt; XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**  
(continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable